the momentum of the atoms; active or kinetic energy the momentum of masses of atoms ; and latent or potential energy was the momentum of atoms dancing to and fro each on its own ground. And between the atoms was the ether, also endowed with strictly mechanical properties, mass, incompressibility, elasticity; and consisting perhaps, like matter, of spherical atoms of a finer kind closely packed together. It was the apotheosis of the dream of the earlier atomists, of Democritus and Epicurus and Lucretius. There were difficulties, it is true. But the faith of the atomists was strong, and could remove, or at least could ignore, mountains of difficulties. Any misgivings about the possible role of mind in nature were triumphantly squashed by asking the doubter to try to imagine the wagons of a railway train linked together by the friendly sentiments of the engine-driver for the brakesman at the far end of the train.

And yet, be it well noted, there was no remotely adequate theory of the cohesion of the atoms and molecules making up the substance of the steel links which bound the wagons together into a coherent train. And let it be added that to this day no such theory has been excogitated. We are told that in a liquid the constituent molecules slide smoothly around and between one another; while, when the same molecular mass becomes solid, the molecules swing in shorter paths, never ranging beyond certain narrow limits. But this, of course, is mere description; and as to what is the ground for this difference of

behaviour we remain in the dark. Some speak of forces of attraction between the molecules, forces which hold them together in the solid state, but which are insufficiently strong to do this at the higher temperature of the liquid state, in opposition